



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, DC 20380-0001

MCO 1543.12

C2I

9 Jun 93

MARINE CORPS ORDER 1543.12 W/CH 1

From: Commandant of the Marine Corps
To: Distribution List

Subj: MATERIEL FIELDING PLAN FOR THE COMBAT RUBBER
RECONNAISSANCE CRAFT (CRRC)

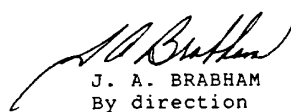
Encl: (1) Materiel Fielding Plan for the Combat Rubber
Reconnaissance Craft (CRRC)

1. Purpose. The enclosure is provided as information and instructions concerning the fielding of the CRRC and related support items.

2. Information. The CRRC is being fielded to satisfy the need for a standard small, lightweight, inflatable, rugged boat to perform various reconnaissance missions. The CRRC replaces the Inflatable Boat, Small (Table of Authorized Materiel Control Number (TAMCN) C4155), Military Amphibious Reconnaissance Boat and all other small rubber inflatable boats without a TAMCN which exist in the Fleet Marine Force.

3. Action. The Commanders of each organizational element concerned shall ensure implementation of the provisions of this Order.

4. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.


J. A. BRABHAM
By direction

DISTRIBUTION: PCN 10201835800

Copy to: 7000110 (55)
8145005 (2)
7000144/8145001 (1)
7000099 (1)
7230064 (1)



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
2 NAVY ANNEX
WASHINGTON, DC 20380-1775

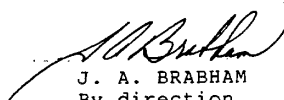
MCO 1543.12 Ch 1
CBGR
9 May 94

MARINE CORPS ORDER 1543.12 Ch 1

From: Commandant of the Marine Corps
To: Distribution List

Subj: MATERIEL FIELDING PLAN FOR THE COMBAT RUBBER
RECONNAISSANCE CRAFT (CRRC)

1. Purpose. To direct pen changes to the basic Order.
2. Action. Appendix A to Enclosure (1), page A-1, change T/E No "N1176" to "N1028" and Unit Title "HQ Co, Inf Regt, 2d MarDiv" to "Assault Boat Co, HQ Bn, 2d MarDiv."
3. Filing Instructions. File this Change transmittal immediately behind the signature page of the basic Order.


J. A. BRABHAM
By direction

DISTRIBUTION: PCN 10201835801

Copy to: 7000110 (55)
8145005 (2)
7000099, 144/8145001/7230057 (1)

MATERIEL FIELDING PLAN
FOR THE
COMBAT RUBBER RECONNAISSANCE CRAFT (CRRC)

1. Introduction

a. Source of Requirement. The CRRC has been fielded to satisfy Required Operational Capable No. INT 1.09, Inflatable Boat, Small (IBS) and Silenced Propulsion System. In addition, Commanding General, Marine Corps Combat Development Command (MCCDC) message 252000Z JUL 90 identified a need for a CRRC to provide the Fleet Marine Force (FMF) with a standardized small boat to replace all other small boats.

b. Points of Contact

<u>Name</u>	<u>Command /Telephone</u>
GySgt Scriven	PROJECT OFFICER CRRC MARCORSYSCOM (C2IA) 2033 BARNETT AVENUE SUITE 315 QUANTICO VA 22134-5010 DSN: 278-3472 COML: (703) 640-3472
Maj Thompson	ILS OFFICER CRRC MARCORSYSCOM (C2IL) 2033 BARNETT AVENUE SUITE 315 QUANTICO VA 22134-5010 DSN: 278-2234 COML: (703) 640-2234
Tom Linden	EQUIPMENT SPECIALIST CRRC MARCORLOGBASES (CODE 835-1) ALBANY GA 31704-5000 DSN: 567-6534 COML: (912) 439-6534

ENCLOSURE (1)

MCO 1543.12
9 Jun 93

Doug Jones

TECHNICAL MANUALS
CRRC
MARCORSYSCOM (PSL-M3)
2033 BARNETT AVENUE SUITE 315
QUANTICO VA 22134-5010
DSN: 278-4269
COML: (703) 640-4269

Bill Arnold

NAVY EQUIPMENT INVENTORY SUPERVISOR
SPCC
MECHANICSBURG PA 17055
DSN: 430-3207
COML: (717) 790-3207

Brian Fahey

NAVY PROVISIONER
SPCC
MECHANICSBURG PA 17055
DSN: 430-3709
COML: (717) 790-3709

LtCol Piccirilli

TRAINING COORDINATOR
CRRC
MARCORSYSCOM (PSL-MT)
2033 BARNETT AVENUE SUITE 315
QUANTICO VA 22134-5010
DSN: 278-3739
COML: (703) 640-3739

Capt Monshaur

TRAINING AND EDUCATION DIVISION
(CODE C462)
QUANTICO VA 22134-5001
DSN: 278-3701
COML: (703) 640-3701

c. Fielding Methodology

(1) General Fielding Plan. The CRRC 15 being fielded vertically as shown in appendix A. This allows the units with the greatest need, to accept the CRRC before the other units. Every effort will be made to have a unit's total allowance arrive in one shipment. The shipments are planned to be synchronized with the training which will be provided within four weeks of delivery by the New Equipment Training Team (NETT) (see paragraph 3c(3)).

(2) Method of Fielding. The CRRC initial issue will be provided by MARCORSYSCOM to the units as an SL-3 complete item per the supply system responsible item section of SL-3-09665A.

ENCLOSURE (1)

d. Replace Systems/Equipment. IBS Table of Material Control Number (TAMCN) C4155, Military Amphibious Reconnaissance System and all other miscellaneous small inflatable boats of this size, class, and capability will be replaced by the CRRC.

2. System Description. See Figure 1-1 for the drawing of the CRRC.

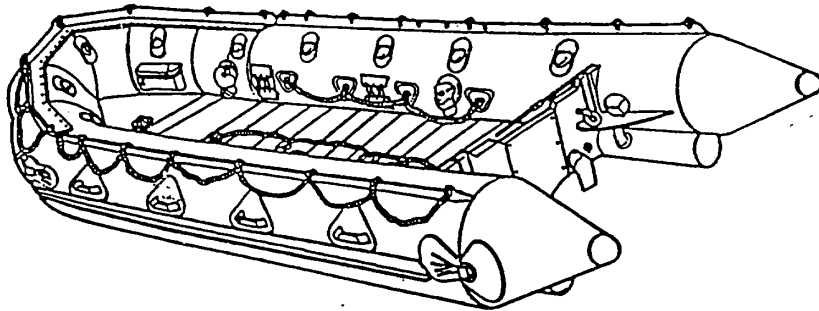


Figure 1-1.--Combat Rubber Reconnaissance Craft (CRRC).

Enclosure (1)

MCO 1543.12
9 Jun 93

a. Administrative Information

(1) Nomenclature. Boat, Inflatable (Note: This is the official nomenclature which was assigned, however, CRRC is the nomenclature used bore commonly in the FMF).

(2) TAMCN. C5901VIAK

(3) Stores Account Code (SAC). 3

(4) National Stock Number (NSN). 1940-01-262-3993

(5) Unit of Issue. Each

(6) Unit Cost. \$8,670.00 (basic boat)

(7) Support Cost. N/A

(8) Petroleum, Oil, and Lubricants. N/A

(9) Equipment Density. Normal

(10) Readiness Reporting. Yes

(11) Identification Number. 09665A

b. Physical Characteristics

	<u>Operational Configuration</u>	<u>Storage/Shipping Configuration</u>
(1) Length	185 in	59 in
(2) Width	75 in	28.5 in
(3) Height	30 in	24 in
(4) Square	97 ft2	12 ft2
(5) Cube	241 ft3	24 ft3
(6) Weight	265 lbs	265 lbs
(7) Stowage	97 ft2	12 ft2

(8) Power Requirements. Improved Military Amphibious Reconnaissance System (IMARS), TAMCN C5262. (Note: The CRRC can be modified to operate with dual IMARS after the installation of the transom stiffening kit (TSK) and dual engine control (DEC).)
ENCLOSURE (1)

c. Operational Characteristics. The CRRC will give the Marine Corps the capability to insert and extract small teams of Marines to and from the shore. The CRRC is capable of operating in various environments, weather conditions, climates, sea, and surf conditions. Although the CRRC can be carried by a team of Marines, a trailer will be available for administrative transport and storage. With ancillary equipment explained in the technical manual (TM), the CRRC can be inflated with CO2 and be brought to the water's surface. The CRRC is also capable of being dropped by parachute into the water.

d. Associated/Related Systems/Equipment. The CRRC will interface with the IMARS Outboard Motor (TAMCN C5262), the CRRC Trailer (TAMCN M5050), TSK, navigation console, and the boat safety kit (BSK).

3. Logistics Support

a. Maintenance Support. The maintenance concept for the CRRC and its component items (i.e., TSK, DEC, navigation console, and BSK) calls for first through third echelon maintenance. Organizational (first and second echelon) level maintenance is to be performed by the owning units. Third echelon maintenance is to be completed by the FSSG and units that are authorized to conduct third echelon maintenance in accordance with the unit's Table of Organization (T/O) cover page (logistics statement). The specific preventive maintenance (PM) and corrective maintenance (CM) tasks for the CRRC are provided in TM-09665A-13&P. Specific PM and CM actions for the TSK, navigation console, and DEC are located in TM 09665A-13&P/1-2. Specific PM and CM tasks for the BSK are provided in its TM. Maintenance personnel should determine which echelon of maintenance is needed to complete the tasks by referring to the Source, Maintenance, and Recoverability codes in the repair parts section of the TM and also by referring to the Maintenance Allocation Chart section of the TM, if provided.

(1) First Echelon. First echelon (operator) maintenance includes the basic care, cleaning, inventory, and before, during, and after PM actions. Specific first echelon tasks include the assembly/inflation and disassembly/deflation of the CRRC. The CRRC needs to be cleaned with fresh water after each operation to remove any sand, salt, or debris. Before, during, and after checks for tears or signs of wear should also be completed as a first echelon maintenance task.

(2) Second Echelon. Second echelon maintenance should be completed by 0321 MOS personnel who have attended Zodiac's NETT

ENCLOSURE (1)

MCO 1543.12
9 Jun 93

course or appropriate service school. Specific second echelon maintenance tasks include, but are not limited to, pressure tests and repair of any tears or leaks in the rubber portion of the CRRC. PM and CM of all valves are also second echelon maintenance tasks.

(3) Third Echelon. Third echelon maintenance tasks should be completed by the Small Craft Intermediate Maintenance Activity in the FSSG. Specific tasks include, but are not limited to: replacement of the transom, repair of the hull or transom which can not be completed at first or second echelon, and replacement of valves.

(4) Fourth Echelon. N/A

(5) Fifth Echelon. N/A

b. Contractor Support Requirements

(1) Depot Support. No depot rebuild is required.

(2) Interim Contractor Support. CRRC's requiring maintenance that is overflow from a third echelon facility may be contracted with an authorized Zodiac dealer, telephone (301) 643-4141. This may be authorized only on a case by case basis in accordance with local regulations. Using units will be required to fund this maintenance with Operations and Maintenance (O&M) funds and record all maintenance actions as per MCO 4790.2.

(3) Interim Contractor Supply Support (ICSS). ICSS for the TSK and DEC is available until provisioning is complete. The specific guidelines for using ICSS are provided in SI 09665A.

c. Manpower, Personnel, and Training

(1) Personnel Requirements. The CRRC will not have an impact on current manpower and personnel structure. The current T/O strength will be used to support the CRRC.

(2) Operator Training Requirements. The following are various ways to become a licensed coxswain (MOS 8111) in order to properly and safely operate the CRRC with both single and dual IMARS.

(a) Marines can learn setup, operation, and first and second echelon maintenance for the CRRC by attending either the LFTCPac or LFTCLant Coxswains Course. The Small Boat Coxswain Course CRRC/RRC, Course ID # G-061-4514, includes 30 days of training.

ENCLOSURE (1)

9 Jun 93

(b) Graduates from the basic Reconnaissance Marine Course # 4621 (service school code AHK), which have been taught by LFTCPac and LFTCLant, will also be authorized to operate the CRRC. These graduates are issued a wallet-sized license identical to a Motor Transport operator's license.

(3) Maintenance Training Requirements. The maintenance training plan consists of three phases:

(a) Initial Contractor Training. The MARCORSYSCOM Project Officer will head a NETT comprised of instructors from Zodiac that will travel to each of the major installations to conduct a maintenance course. The courses will be taught at Camp Lejeune, Camp Pendleton, Camp Hansen, MCAS Kaneohe Bay, and Little Creek. Each course will last for ten days. A graduate will be able to assemble, disassemble, inspect, and conduct first through third echelon maintenance using the appropriate technical reference and the tools and materials prescribed in the TM. A host unit will be requested by MARCORSYSCOM via naval message at each training location. The message will give details, dates, and quotas to all units that are authorized by this Order to hold the CRRC. The host unit will provide facilities and six previously procured (old) CRRC to be used by the class for repair. The NETT will bring the tools, materials, manuals, and teaching aids to the training sites. This new equipment training will be conducted only one time at each site for up to 18 students in order to establish a wide, standardized training base throughout the active and reserve fleet. The target population is senior operators, maintainers, and instructors, although no previous experience is required. The NETT will be funded by MARCORSYSCOM. Temporary Additional Duty and other funding requirements to get students to the training sites will be a unit responsibility.

(b) Follow-on Training. At the conclusion of the NETT's, the Small Craft Repair sections in the FSSG are to provide maintenance training for the using units. This training will consist primarily of first and second echelon maintenance. Funding for the course is the responsibility of the owning unit.

(c) Individual Training Standards (ITS). The ITS will be updated by MCCDC, Training and Education Division to reflect the current configuration of the standardized CRRC using updated references and the results of the NETT. Marine Corps Engineer School will then become the formal training school for maintenance on the CRRC.

(4) Training Support Items. The host unit for the NETT will provide or arrange for six CRRC to be used as training aids

ENCLOSURE (1)

MCO 1543.12
9 Jun 93

and repair mockups (unserviceable boats are encouraged). Upon completion of the NETT, these CRRC and other old boats that are above the units allowance will be disposed of in accordance with the retrograde plan (see paragraph 4a(3)).

d. Supply Support

(1) Provisioning. All provisioning for the CRRC has been accomplished by Ship Parts Control Center (SPCC), Mechanicsburg, PA in coordination with Commander, Marine Corps Logistics Bases (COMMARCORLOGBASES), Albany, GA (Code 835-1). SPCC has established an Associated Parts List (APL) for the CRRC. The APL has been reformatted as a Repair Parts List and is included in TM-09665A-13&P. The provisioning for the TSK, navigation console, DEC, and BSK is in progress. ICSS is available until provisioning is complete. Requesting units must follow 51 09665A when using ICSS.

(2) Replenishment. The CRRC is a SAC 3 and Type 1 item. Units must either have on hand or on order the number of CRRC which are indicated on their Table of Equipment (T/E). The CRRC is managed and funded by COMMARCORLOGBASES, Albany, GA. Replacement parts or an entire CRRC can be requisitioned from one of two sources of supply via normal Military Standard Requisitioning and Issue Procedures (MILSTRIP) procedures. SPCC, Mechanicsburg, PA (N35) is the primary source of supply and Government Services Administration is the secondary source of supply. With both sources, the supply requisition needs to be sent via COMMARCORLOGBASES, Albany, GA (835-1). The TSK, DEC, and BSK are Using Unit Responsible items. MILSTRIP requisitions must be used to order entire items or piece parts and have to be replenished with O&M funds.

e. Support Equipment

(1) Special Tools. The special tools listed below are needed to support the CRRC. They are provided by Zodiac (Commercial and Government Entity code 60042) and will be listed in the component parts section of TM-09665A-13&P. Refer to 51 09665A for the requisition of tools needed during the interim supply support time.

<u>Nomenclature</u>	<u>Manufacturers</u> <u>Part Number (PIN)</u>
Extractor, overpressure valve	Zodiac T780SW
Pumice Stone	Zodiac 7013
Spanner half moon	Zodiac 7030
Spanner, for collar nut	Zodiac 7031

ENCLOSURE (1)

Nomenclature	P/N
Wrench, 10 mm deep socket spanner	Zodiac 7032
Intercommunication extractor	Zodiac 7034
Spanner, Fly wheel	Zodiac 7082
Pressure Gauge, millibar	Zodiac 2215

(2) Common Tools. All the common tools needed to maintain the CRRC are listed in the common tools section of the TM-09665A-13&P.

(3) Special Purpose Test Equipment. N/A

(4) General Purpose Test Equipment. N/A

(5) Test Program Sets. N/A

(6) Other Support Equipment. A three tier trailer (TAMCN M5050) is planned to be available to transport and store the CRRC during administrative situations.

f. Technical Publications. The CRRC will be supported by TM 09665A-13&P. The TM will provide operation and maintenance procedures, component parts list, and repair parts lists for the CRRC. In addition, a commercial waterproof operator's manual (P/N 11044) will be delivered with the CRRC. The operator's manual should be carried in the CRRC and used as a quick reference. The TSK and DEC are supported by TM 09665A-13&P/1-2 and S1 09665A. The BSK is supported by its own Technical Instruction, SL-3 and SL-4. ICSS for the BSK is included within S1 09665A.

g. Commuter Resources Support. N/A

h. Facilities

(1) Existing Facilities. The CRRC will be supported by the same facilities currently being used for other small inflatable boats.

(2) New Facilities. No new facilities are needed to support the CRRC.

(3) Interim Facilities. No interim facilities are needed to support the CRRC.

ENCLOSURE (1)

9 Jun 93

i. Packaging, Handling, Storage, and Transportation

(1) Packaging. The CRRC will need to be deflated and folded prior to packaging.

(2) Handling. There are no special handling procedures for the CRRC.

(3) Storage. Although the material is considered to be rot-proof, all sand, salt water, petroleum, and debris needs to be removed from the CRRC prior to storage. The TM provides specific storage instructions.

(4) Transportability. The primary means of transporting the CRRC is while it is deflated and packaged in a wooden embarkation box. The CRRC can then be transported worldwide by air, rail, ship, or highway. A secondary means of transportation is on the CRRC trailer.

(5) Transportation. The CRRC is light enough to be carried by a small team of Marines over short distances. A trailer will be available for the CRRC, however, it is intended to be used only for administrative storage and local transport.

j. Warranties. Neither the CRRC nor any of its component parts meet the requirements of MCO 4105.2 for a government procured warranty, however, a commercial warranty is offered and is overpacked with the CRRC. Using units are responsible for understanding and adhering to the conditions of the commercial warranty. To file a warranty claim, follow the guidelines outlined in MCO 4105.2.

4. Actions Required To Place Equipment In Service

a. Gaining Commands

(1) Prior to Placing the CRRC Into Service

(a) Place the CRRC on administrative deadline until all of the other actions in this section are complete.

(b) Ensure all the necessary Test, Measurement, and Diagnostic Equipment is on hand prior to performing any maintenance on the CRRC.

(c) Ensure all the technical publications are on hand.

ENCLOSURE (1)

9 Jun 93

(d) Ensure maintenance personnel have attended the necessary training.

(e) Request approval to place the CRRC into service from the Commander, MARFORLANT; Commander, MARFORPAC; or Commanding General, MARRESFOR, as appropriate.

(f) Identify to the MARCORSYSCOM Project Officer as soon as possible the dates, desired location, and estimated number of students to attend the NETT course.

(2) Materiel Defects Reporting. If any of the contents of the CRRC arrived damaged or missing, a SF 368 Quality Deficiency Report (QDR) should be submitted to COMMARCORLOGBASES (808-1), Albany, GA. Additionally, if any of the items break or tear other than from normal use, a QDR should also be submitted.

(3) Retrograde of Existing Equipment

(a) Complete a limited technical inspection on all CRRC's which are currently on hand.

(b) Dispose of any unserviceable CRRC as per the appropriate supply directives.

(c) Coordinate with COMMARCORLOGBASES, Albany, GA (Code 835-1) on the shipment of any serviceable CRRC to MARRESFOR as an interim item for use until their new CRRC are delivered.

(d) MARRESFOR notify the MARCORSYSCOM Project Officer concerning unserviceable CRRC for the possible transfer to other services.

(4) Obtaining Supporting Consumable. N/A

b. Amphibious Reconnaissance School/Course. Incorporate the use of the CRRC in lesson plans and instruction as appropriate.

c. COMMARCORLOGBASES. Albany, GA

(1) Assist in the life cycle management of the CRRC.

(2) Reconcile with SPCC, Mechanicsburg on the usage of parts by Marine Corps units to prevent over-stockage and identification of long lead time items. This reconciliation is to be completed six months after this Order is signed and annually thereafter.

ENCLOSURE (1)

MCO 1543.12
12 Jun 93

d. FSSG's. Provide intermediate maintenance support for the proper maintenance of the CRRC.

e. LFTC's

(1) Organize and instruct a small craft repair course covering all the echelons of repair (first, second, and third) necessary to support the CRRC.

(2) Submit the CRRC course curriculum to MCCDC, Training and Education Division, for approval.

f. MCCDC. Training and Education Division. Review and approve the CRRC course submitted by the LFTC's.

MCO 1543.12
9 Jun 93

LIST OF ALLOWANCES AND DELIVERY SCHEDULES

ACTIVE FORCES

T/E No	UNIT TITLE	No. Units	UNIT ALLOW	PLANNED FY 92 QTR			
				1	2	3	4
				5980	Phib Recon Scol, LFTCLant	1	3
N4618	For Recon Co, 1st SRIG	1	11			11	
N4818	Det, For Recon Co, 3d SRIG	1	4			4	
7441	MARCORSYSCOM (C2IA)	1	1		1		
N/A	NSDTC, Panama City, FL	1	8			8	
7540	MC Engr Scol	1	5			5	

T/E No	UNIT TITLE	No. Units	UNIT ALLOW	PLANNED FY 93 QTR			
				1	2	3	4
				5980	Phib Recon Scol, LFTCLant	1	12
5981	Phib Recon Crse, LFTCPac	1	15	15			
7450	TBS	1	3		3		
B1432	A Co 3d Recon Bn, 1st MEB	1	9	9			
N4618	For Recon Co, 1st SRIG	1	7	7			
N4718	For Recon Co, 2d SRIG	1	9		9		
N4818	Det, For Recon Co, 3d SRIG	1	5	5			
N1412	Recon Co, 1st Inf Regt, 1st MarDiv	1	9				9
N1412	Recon Co, 5th Inf Regt, 1st MarDiv	1	9				9
N1422	Recon Co, Recon Bn, 2d MarDiv	2	9		18		
N1432	Recon Co, 4th Inf Regt, 3d MarDiv	1	9				9
N1432	Recon Co, 9th Inf Regt, 3d MarDiv	1	9				9

T/E No	UNIT TITLE	No. Units	UNIT ALLOW	PLANNED FY 94 QTR			
				1	2	3	4
				N1166	HQ Co, Inf Regt, 1st MarDiv	2	30
N1028	Assault Boat Co, HqBn, 2d MarDiv	2	30	30	30		
N4718	For Recon Co, 2d SRIG	1	9		9		
7441	MARCORSYSCOM (C2IA)	1	2	1	1		
5980	Phib Recon Scol, LFTCLant	1	15		15		
5981	Phib Recon Crse, LFTCPac	1	15			15	
N4918	31st MEU	1	18		18		
N4637	H&S Co, 1st Radio Bn	1	8				8
N4737	H&S Co, 2d Radio Bn	1	6				6
N/A	PWR	1	68				68

Appendix A to
ENCLOSURE (1)

MCO 1543.12
9 Jun 93

RESERVE FORCES

T/E <u>No</u>	UNIT <u>TITLE</u>	No. <u>Units</u>	UNIT <u>ALLOW</u>	PLANNED FY 92 QTR			
				<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
N1442	Recon Co, Recon Bn, 4th MarDiv	5	3				15
M4623	Force Recon Co, MARRESFOR	2	6	12			
		Total	434				

Appendix A to
ENCLOSURE (1)

MCO 1543.12
9 Jun 93

SCHEDULE OF EVENTS

Began Fielding	3rd QTR FY 92
Initiating Service Date	3rd QTR FY 92
Initial Operational Capability	3rd QTR FY 92
New Equipment Training Team begins	3rd QTR FY 93
Full Operational Capability	4th QTR FY 94

Appendix B to
ENCLOSURE (1)